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**REMARKS**

In view of the following discussion, the Applicants submit that none of the claims now pending in the application is anticipated under the provisions of 35 U.S.C. § 102 or made obvious under the provisions of 35 U.S.C. § 103. Thus, the Applicants believe that all of these claims are now in allowable form.

**I. OBJECTION TO THE SPECIFICATION**

The Examiner has objected to the Specification for informalities. Specifically, the Examiner submits that a phrase is missing from paragraph [00013]. In response, the Applicants have amended paragraph [00013] in order to more clearly describe aspects of the present invention.

In particular, the Applicants have amended paragraph [00013], line 6 of the Specification, in accordance with the Examiner's suggestion, to read "... the minimum percentage of available bandwidth allocated ...", replacing, "... the minimum percentage allocated ...". Accordingly, the Applicants respectfully request that the objection to the Specification be withdrawn.

**II. OBJECTION TO CLAIMS 12 AND 13**

The Examiner has objected to claims 12 and 13 for informalities. Specifically, the Examiner submits that in both claim 12 and claim 13, words are missing between the terms "percentage" and "allocated". In response, the Applicants have amended claims 12 and 13 to more clearly recite aspects of the present invention.

In particular, claim 12, line 7 and claim 13, line 2 have both been amended to recite a "percentage of available bandwidth allocated", replacing a "percentage allocated". The Applicants respectfully submit that this amendment adequately clarifies the subject matter recited in claims 12 and 13. Accordingly, the Applicants respectfully request that the objection to claims 12 and 13 be withdrawn.

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**III. REJECTION OF CLAIMS 1-3, 6-8, 12-13 AND 20 UNDER 35 U.S.C. § 102**

**1. Claims 1-3, 6-8 and 20**

The Examiner has rejected claims 1-3, 6-8 and 20 under 35 U.S.C. §102(e) as being anticipated by the Zavalkovsky et al. patent (United States Patent No. 6,839,327, issued on January 4, 2005, hereinafter "Zavalkovsky"). In response, the Applicants have amended independent claims 1 and 20, from which claims 2-3 and 6-8 depend, in order to more clearly recite aspects of the present invention.

Zavalkovsky teaches a method and apparatus for maintaining consistent per-hop forwarding behavior in a network using network-wide per-hop behavior definitions. Zavalkovsky does not teach, show or suggest, however, a method for attaining per-hop behavior for a plurality of classes of packet traffic in which an average packet forwarding rate for each class over a time interval of approximately five seconds is determined, as positively recited by Applicants' independent claims 1 and 20, as amended. Therefore, the Applicants submit that for at least the reasons set forth above, independent claims 1 and 20, as amended, fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder.

Dependent claims 2-3 and 6-8 depend from claim 1 and recite additional features therefore. As such, and for at least the reasons set forth above, the Applicants submit that claims 2-3 and 6-8 are not anticipated by the teachings of Zavalkovsky. Therefore, the Applicants submit that dependent claims 2-3 and 6-8 also fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder.

**2. Claims 12-13**

The Examiner has rejected claims 12-13 under 35 U.S.C. §102(e) as being anticipated by the Baker et al. patent (United States Patent No. 6,775,231, issued on August 10, 2004, hereinafter "Baker"). In response, the Applicants have amended independent claim 12, from which claim 13 depends, in order to more clearly recite aspects of the present invention.

Baker teaches a method for dynamic, weighted resource sharing. Baker does

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not teach, show or suggest, however, a method in which a packet class having a non-empty queue and a highest scheduling priority is selected for transmitting a packet when each packet class having a non-empty queue is receiving more than a nominal departure rate and more than an allocated rate priority percentage of available bandwidth, as positively recited by Applicants' independent claim 12, as amended. Therefore, the Applicants submit that for at least the reasons set forth above, independent claim 12, as amended, fully satisfies the requirements of 35 U.S.C. §102 and is patentable thereunder.

Dependent claim 13 depends from claim 12 and recites additional features therefore. As such, and for at least the reasons set forth above, the Applicants submit that claim 13 is not anticipated by the teachings of Baker. Therefore, the Applicants submit that dependent claim 13 also fully satisfies the requirements of 35 U.S.C. §102 and is patentable thereunder.

#### **IV. REJECTION OF CLAIMS 4, 9-11, 14-16, 17 AND 19 UNDER 35 U.S.C. § 103**

##### **1. Claims 4 and 9-11**

The Examiner rejected claims 4 and 9-11 under 35 U.S.C. §103(a) as being unpatentable over Zavalkovsky in view of Baker. In response, the Applicants have amended independent claim 1, as discussed above, from which claims 9-11 depend, in order to more clearly recite aspects of the present invention. Additionally, the Applicants have cancelled claim 4.

Zavalkovsky and Baker have been discussed above. As discussed, Zavalkovsky fails to teach, show or suggest a method for attaining per-hop behavior for a plurality of classes of packet traffic in which an average packet forwarding rate for each class over a time interval of approximately five seconds is determined, as positively recited by Applicants' independent claim 1, as amended. Baker similarly fails to teach or suggest the determining an average packet forwarding rate over a time interval of approximately five seconds; thus, Baker does not bridge the gap in the teachings of Zavalkovsky. Therefore, the Applicants submit that for at least the reasons set forth above,

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independent claim 1, as amended, fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder.

Dependent claims 9-11 depend, respectively, from claim 1 and recite additional features therefore. As such, and for at least the reasons set forth above, the Applicants submit that claims 9-11 are not made obvious by the teachings of Zavalkovsky in view of Baker. Therefore, the Applicants submit that dependent claims 9-11 also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

## **2. Claims 14, 15 and 19**

The Examiner rejected claims 14, 15 and 19 under 35 U.S.C. §103(a) as being unpatentable over Baker in view of the Kalkunte et al. patent (United States Patent No. 6,470,016, issued October 22, 2002, hereinafter "Kalkunte"). In response, the Applicants have amended independent claim 12, as discussed above, from which claims 14, 15 and 19 depend, in order to more clearly recite aspects of the present invention.

Baker has been discussed above. Kalkunte teaches an adaptive, weighted round robin scheduling method for scheduling variable-length frame transmissions from a plurality of output queues having different transmission priorities.

As discussed, Baker fails to teach, show or suggest a method in which a packet class having a non-empty queue and a highest scheduling priority is selected for transmitting a packet when each packet class having a non-empty queue is receiving more than a nominal departure rate and more than an allocated rate priority percentage of available bandwidth, as positively recited by Applicants' independent claim 12, as amended. Kalkunte similarly fails to teach or suggest such a method for determining a packet class for transmitting a packet; thus, Kalkunte does not bridge the gap in the teachings of Baker. Therefore, the Applicants submit that for at least the reasons set forth above, independent claim 12, as amended, fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder.

Dependent claims 14, 15 and 19 depend, respectively, from claim 12 and recite additional features therefore. As such, and for at least the reasons set forth above, the

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Applicants submit that claims 14, 15 and 19 are not made obvious by the teachings of Baker in view of Kalkunte. Therefore, the Applicants submit that dependent claims 14, 15 and 19 also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

### 3. Claim 16

The Examiner rejected claim 16 under 35 U.S.C. §103(a) as being unpatentable over Baker in view of Kalkunte and further in view of the Wang et al. patent (United States Patent No. 6,748,435, issued June 8, 2004, hereinafter "Wang"). In response, the Applicants have amended independent claim 12, as discussed above, from which claim 16 depends, in order to more clearly recite aspects of the present invention.

Baker and Kalkunte have been discussed above. Wang teaches a traffic conditioning marker associated with a router, in which the marker monitors the rate of a designated group of data packets flowing therethrough, and adjusts a priority level of the group of packets depending on whether the rate is greater than or less than a negotiated rate.

As discussed, Baker and Kalkunte fail, singularly and in combination, to teach, show or suggest a method in which a packet class having a non-empty queue and a highest scheduling priority is selected for transmitting a packet when each packet class having a non-empty queue is receiving more than a nominal departure rate and more than an allocated rate priority percentage of available bandwidth, as positively recited by Applicants' independent claim 12, as amended. Wang similarly fails to teach or suggest such a method for determining a packet class for transmitting a packet; thus, Wang does not bridge the gap in the teachings of Baker and Kalkunte. Therefore, the Applicants submit that for at least the reasons set forth above, independent claim 12, as amended, fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder.

Dependent claim 16 depends from claim 12 and recites additional features therefore. As such, and for at least the reasons set forth above, the Applicants submit that claim 16 is not made obvious by the teachings of Baker in view of Kalkunte and

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further in view of Wang. Therefore, the Applicants submit that dependent claim 16 also fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder.

#### **4. Claim 17**

The Examiner rejected claim 17 under 35 U.S.C. §103(a) as being unpatentable over Baker in view of Wang. In response, the Applicants have amended independent claim 12, as discussed above, from which claim 17 depends, in order to more clearly recite aspects of the present invention.

Baker and Wang have been discussed above. As discussed, Baker and Wang fail, singularly and in combination, to teach, show or suggest a method in which a packet class having a non-empty queue and a highest scheduling priority is selected for transmitting a packet when each packet class having a non-empty queue is receiving more than a nominal departure rate and more than an allocated rate priority percentage of available bandwidth, as positively recited by Applicants' independent claim 12, as amended. Therefore, the Applicants submit that for at least the reasons set forth above, independent claim 12, as amended, fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder.

Dependent claim 17 depends from claim 12 and recites additional features therefore. As such, and for at least the reasons set forth above, the Applicants submit that claim 17 is not made obvious by the teachings of Baker in view of Wang. Therefore, the Applicants submit that dependent claim 17 also fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder.

#### **V. ALLOWABLE SUBJECT MATTER**

The Applicants thank the Examiner for the comments regarding the allowability of claims 5 and 18, if rewritten in independent form to include all of the limitations of the respective base and intervening claims.

The Applicants have amended independent claims 1 and 20, in accordance with the Examiner's suggestion, to include, the limitations of original claim 5 and all intervening claims (*i.e.*, original claim 4). In addition, the Applicants have amended

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independent claim 12, in accordance with the Examiner's suggestion, to include, the limitations of original claim 18. Accordingly, the Applicants respectfully submit that claims 1, 12 and 20, as amended, and all claims that depend therefrom, are now in allowable form.

#### VI. NEW CLAIMS

The Applicants have added new claims 21-23. New claim 21 claims an apparatus including means for performing the limitations recited in amended independent claims 1 and 20 (*i.e.*, including the limitations of original claims 4 and 5). New claims 22 and 23 claim, respectively, a computer readable medium and an apparatus including means for performing the limitations recited in amended independent claim 12 and present no new matter. The Applicants respectfully submit that new claims 21-23 are allowable for the same reasons that claims 1, 12 and 20, as amended, are allowable.

#### VII. CONCLUSION

Thus, the Applicants submit that all of the presented claims now fully satisfy the requirements of 35 U.S.C. §102 and 35 U.S.C. §103. Consequently, the Applicants believe that all the presented claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring the issuance of a final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Kin-Wah Tong, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

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Respectfully submitted,

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Date



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